

IN THE CLAIMS

1. (Currently Amended) A process for manufacturing an integrated circuit, the process comprising:

providing a substrate comprising a dielectric layer (~~e.g., 1~~) over a conductive material (~~e.g., 3, 5~~);

depositing a hardmask (~~e.g., 7~~) over the dielectric layer (~~e.g., 1~~);

applying a first photoresist (~~e.g., 9~~) over the hardmask (~~e.g., 7~~) and photodefining at least one first elongated opening (~~e.g., 11~~);

etching the hardmask (~~e.g., 7~~) and partially etching the dielectric (~~e.g., 1~~) to deepen the at least one first elongated opening to form a trench (~~e.g., 13~~), the trench having a bottom in the dielectric layer (~~e.g., 1~~);

removing the first photoresist (~~e.g., 9~~);

applying a second photoresist (~~e.g., 15~~) and photodefining at least one second elongated opening (~~e.g., 17, 19~~) across the at least one trench (~~e.g., 13~~);

etching the exposed dielectric (~~e.g., 1~~) from the bottom of the at least one trench (~~e.g., 13~~) down to the underlying conductive material (~~e.g., 3, 5~~).

2. (Currently Amended) The process of claim 1, further comprising removing the second photoresist (~~e.g., 15~~).
3. (Currently Amended) The process of claim 1, further comprising removing the hardmask (~~e.g., 7~~).
4. (Original) The process of claim 1, further comprising metallization and planarization.
5. (Currently Amended) The process of claim 1, wherein the dielectric layer (~~e.g., 1~~) is silicon dioxide.
6. (Currently Amended) The process of claim 1, wherein the hardmask (~~e.g., 7~~) is silicon nitride.
7. (Currently Amended) The process of claim 1, wherein the step of etching the exposed dielectric (~~e.g., 1~~) from the bottom of the at least one trench (~~e.g., 13~~) down to the underlying conductive material (~~e.g., 3, 5~~) forms at least one third opening (~~e.g., 18, 20~~) to the underlying conductive material (~~e.g., 3, 5~~) and the at least one third opening (~~e.g., 18, 20~~) is filled with conductive material to form a contact or a via (~~e.g., 23, 25~~).

8. (Currently Amended) The process of claim 1, wherein the step of etching the exposed dielectric (~~e.g., 1~~) forms at least one third opening (~~e.g., 18, 20~~) that has substantially a quadrilateral cross-section.
9. (Currently Amended) The process of claim 1, wherein the step of etching the exposed dielectric (~~e.g., 1~~) forms at least one third opening (~~e.g., 18, 20~~) that has substantially a square cross-section.
10. (Currently Amended) The process of claim 1, wherein the step of etching the exposed dielectric (~~e.g., 1~~) forms at least one third opening (~~e.g., 18, 20~~) that has substantially a rectangular cross-section.
11. (Currently Amended) The process of claim 1, wherein the step of etching the exposed dielectric (~~e.g., 1~~) forms at least one third opening (~~e.g., 18, 20~~) that has a feature size of about 0.5 micron or less.
12. (Original) The process of claim 1, wherein substantially no etch stop layer is deposited at the bottom of the trench.
13. (Currently Amended) A process for manufacturing an integrated circuit, the process comprising:
 - providing a substrate comprising silicon dioxide dielectric layer (~~e.g., 1~~) over a conductive material (~~e.g., 3, 5~~);
 - depositing a silicon nitride hardmask (~~e.g., 7~~) over the dielectric layer;
 - applying a first photoresist (~~e.g., 9~~) over the hardmask (~~e.g., 7~~) and photodefining at least one elongated opening;
 - etching the hardmask and partially etching the dielectric to deepen the at least one elongated opening (~~e.g., 11~~) to form at least one trench (~~e.g., 13~~), the trench forming a bottom in the dielectric layer (~~e.g., 1~~);
 - stripping the first photoresist (~~e.g., 9~~);
 - applying a second photoresist (~~e.g., 15~~) and photodefining at least one second elongated opening (~~e.g., 17, 19~~) across the at least one trench;
 - selectively etching the dielectric (~~e.g., 1~~) from the bottom of the trench (~~e.g., 13~~) down to the underlying conductive material (~~e.g., 3, 5~~).
14. (Currently Amended) A method of making an integrated circuit comprising defining a via or a contact (~~e.g., 23, 25~~) by the intersection of a first elongated opening (~~e.g., 11~~) in a first mask (~~e.g., 9~~) and a second (~~e.g., 17, 19~~) elongated opening in a second

mask (~~e.g., 15~~), and using at least one of the mask openings to define the location of a conductor (~~e.g., 3, 5~~) to which the via or contact (~~e.g., 23, 25~~) is to be connected.